CLAIMS

1. Cosmetic composition for keratinous fibres such as the hair: characterized in that it comprises, in a cosmetically acceptable medium, at least one tacky polymer having a glass transition temperature (Tg) of less than 20°C and at least one fixing polymer having a glass transition temperature (Tg) greater than 15°C.

2. Composition according to Claim 1, characterized in that the tacky polymer has a peeling profile defined by at least one maximum peeling force F_{max} > 3 Newton, and preferably greater than 5 N.

3. Composition according to Claim 2, characterized in that when the glass transition temperature of the tacky polymer is less than -15°C, the peeling profile is defined, in addition, by an energy for separation $E_{s(M/V)}$ of the material brought into contact with a glass surface of less than 300 µJ.

4. Composition according to Claim 2, characterized in that F_{max} is the maximum tensile force, measured with the aid of an extensometer, necessary to peel apart the respective 38 mm^2 surfaces of two rigid, inert and nonabsorbent supports (A) and (B) placed opposite each other; the said surfaces being previously

coated with the tacky polymer previously dissolved at 5% in an aqueous, aqueous-alcoholic or alcoholic solvent, at the rate of 1 mg/mm^2, dried for 24 hours at 22°C under a relative humidity of 50%, then subjected for 20 seconds to a compression of 3 Newton and finally subjected for 30 seconds to pulling at the rate of 20 mm/min.

5. Composition according to Claim 4, characterized in that the supports (A) and (B) consist of polyethylene, polypropylene, metal alloy or glass.

6. Composition according to Claim 2, characterized in that $E_{s(M/V)}$ is the energy provided by the extensometer in order to carry out the separation of the respective 38 mm^2 surfaces of two rigid, inert and nonabsorbent supports (C) and (D) placed opposite each other; one of the said supports consisting of cut glass and the other of the said supports being of an identical nature to the supports (A) and (B) as defined in Claim 4 or 5 and whose surface is previously coated with the tacky polymer previously dissolved at 5% in an aqueous, aqueous-alcoholic or alcoholic solvent, at the rate of 1 mg/mm^2, dried for 24 hours at 22°C under a relative humidity of 50%, the two surfaces of the said supports (C) and (D) being subjected for 20 seconds to a compression of 3 Newton and finally subjected for 30 seconds to pulling at the rate of 20 mm/min.

7. Composition according to Claim 6, characterized in that $E_{s(M/V)}$ is the work calculated by means of the following formula:

$$\int_{Xs1+0.05}^{Xs2} F(x)dx$$

where F(x) is the force necessary to produce a movement (x);

x_{s1} is the movement (expressed in millimetres) produced by the maximum tensile force;

x_{s2} is the movement (expressed in millimetres) produced by the tensile force which allows the complete separation of the two surfaces of the supports (C) and (D).

8. Composition according to any one of the preceding claims, characterized in that the tacky polymer is a branched sulphonic polyester or (meth)acrylic ester polymers.

9. Composition according to any one of the preceding claims, characterized in that the relative concentration by weight of tacky polymer in the composition is greater than 0.01%, preferably greater than 0.1%, and more preferably still greater than 0.5%.

10. Composition according to any one of the preceding claims, characterized in that the fixing polymer has a glass transition temperature (Tg) greater than 25°C.

11. Composition according to any one of the preceding claims, characterized in that the relative concentration by weight of fixing polymer in the composition is greater than 0.01%, and preferably greater than 0.1%.

12. Composition according to Claim 8, characterized in that the branched sulphonic polyester is formed by polymerization of:

(i) at least one difunctional dicarboxylic acid not carrying a sulphonic function;

(ii) at least one difunctional monomer carrying at least one sulphonic function, the functional group(s) being chosen from the group comprising hydroxyl, carboxyl and amino groups;

(iii) at least one diol or a mixture of diol(s) and of diamine(s);

(iv) optionally one difunctional monomer chosen from the group comprising hydroxycarboxylic acids, aminocarboxylic acids and mixtures thereof;

(v) at least one multifunctional reagent carrying at least three functional groups chosen from the group comprising amino, alcohol and carboxylic acid groups.

13. Composition according to Claim 12, characterized in that the polymerization is carried out starting with:

(i) at least one difunctional dicarboxylic acid not carrying a sulphonic function;

(ii) 2 to 15 relative mol% of difunctional monomer carrying at least one sulphonic function;

(iii) at least one diol or a mixture of diol(s) and of diamine(s);

(iv) 0 to 40 relative mol% of the difunctional monomer chosen from the group comprising the hydroxycarboxylic acids, the aminocarboxylic acids and mixtures thereof;

(v) 0.1 to 40 relative mol% of the multifunctional reagent carrying at least three reactive functional groups.

14. Composition according to either of Claims 12 and 13, characterized in that the branched sulphonic polymer contains substantially equal proportions, as number of equivalents, of carboxylic acid functions, on the one hand, and of diol and/or diol and diamine functions, on the other hand.

15. Composition according to any one of Claims 12 to 14, characterized in that the difunctional

dicarboxylic acid (i) is chosen from the group comprising aliphatic dicarboxylic acids, alicyclic dicarboxylic acids and aromatic dicarboxylic acids.

16. Composition according to Claim 15, characterized in that the difunctional dicarboxylic acid (i) is chosen from the group comprising 1,4-cyclohexanedioic acid, succinic acid, glutaric acid, adipic acid, azelaic acid, sebacic acid, fumaric acid, maleic acid, 1,3-cyclohexanedioic acid, phthalic acid, terephthalic acid and isophthalic acid and a mixture thereof.

17. Composition according to any one of Claims 12 to 14, characterized in that the difunctional monomer (ii) is chosen from the group comprising dicarboxylic acids, dicarboxylic acid esters, glycols and hydroxy acids each containing at least one metal sulphonate group.

18. Composition according to any one of Claims 12 to 14, characterized in that the diol (iii) is chosen from the group comprising alkanediols and polyalkylene diols.

19. Composition according to Claim 18, characterized in that the diol (iii) is chosen from the group comprising ethylene glycol, propylene glycol,

diethylene glycol, triethylene glycol and polypropylene glycol.

20. Composition according to any one of Claims 12 to 14, characterized in that the diamine (iii) is chosen from the group comprising alkanediamines and polyalkylenediamines.

21. Composition according to any one of Claims 12 to 14, characterized in that the multifunctional reagent (v) is chosen from the group comprising trimethylolethane, trimethylolpropane, glycerol, pentaerythritol, sorbitol, trimellitic anhydride, erythritol, threitol, dipentaerythritol, pyromellitic dianhydride and dimethylpropionic acid.

22. Composition according to Claim 8, characterized in that the (meth)acrylic ester polymer advantageously comprises:

(a) from 9 to 99% by weight of a (meth)acrylic ester monomer relative to the total weight of the polymer;

(b) up to 90% of comonomer;

(c) from 1 to 10% of a vinylidene monomer containing a carboxyl or hydroxyl group.

23. Composition according to any one of the preceding claims, characterized in that the fixing

polymer is chosen from the anionic, cationic, amphoteric and nonionic fixing polymers and mixtures thereof.

24. Composition according to Claim 23, characterized in that the fixing polymers are provided in solubilized form or in the form of a dispersion of solid particles of polymer.

25. Composition according to Claim 24, characterized in that the cationic fixing polymers are chosen from the polymers comprising primary, secondary, tertiary and/or quaternary amine groups which are part of the polymer chain or which are directly attached to it, and having a molecular weight of between 500 and about 5,000,000 and preferably between 1000 and 3,000,000.

26. Composition according to Claim 23, characterized in that the anionic fixing polymers are polymers comprising groups derived from a carboxylic, sulphonic or phosphoric acid and which have a weight-average molecular weight of between about 500 and 5,000,000.

27. Composition according to Claim 23, characterized in that the fixing polymers are amphoteric polymers chosen from the polymers comprising B and C units randomly distributed in the polymer chain, where B denotes a unit derived from a monomer comprising at least one basic function, in particular a basic nitrogen atom and C

denotes a unit derived from an acidic monomer comprising one or more carboxylic or sulphonic groups or alternatively B and C may denote groups derived from zwitterionic monomers of carboxybetaines or sulphobetaines; B and C may also denote a cationic polymer chain comprising primary, secondary, tertiary or quaternary amine groups, in which at least one of the amine groups carries a carboxylic or sulphonic group attached via a hydrocarbon radical; or alternatively B and C are part of a chain of a polymer containing an ethylene-α,β-dicarboxylic unit of which one of the carboxylic groups has been caused to react with a polyamine comprising one or more primary or secondary amine groups.

28. Composition according to Claim 23, characterized in that the nonionic fixing polymers are polyurethanes.

29. Composition according to Claim 1, characterized in that the fixing polymer is a water-soluble polymer chosen from the group comprising silicone-containing acrylic polymers, polymers based on a vinylpyrrolidone and vinylcaprolactam monomer.

30. Composition according to Claim 1, characterized in that the fixing polymer is a dispersed polymer based on acrylic or methacrylic monomers and esters thereof and a polymer based on styrene monomers.

31. Composition according to any one of the preceding claims, characterized in that it is provided in the form of a vaporizable composition, a foam, a gel or a lotion.

32. Composition according to any one of the preceding claims, characterized in that the cosmetically acceptable vehicle consists of an appropriate solvent, to which additives such as gelling agents or foaming agents may be added.

33. Composition according to any one of the preceding claims, characterized in that it comprises a solvent chosen from water, an alcohol or an aqueous-alcoholic mixture.

34. Composition according to any one of the preceding claims, characterized in that it comprises, in addition, an appropriate quantity of propellant consisting of customary compressed or liquefied gases, preferably compressed air, carbon dioxide or nitrogen, or alternatively a gas which is soluble or otherwise in the composition, such as dimethyl ether, hydrocarbons which are fluorinated or otherwise and mixtures thereof.

35. Aerosol device consisting of a container containing an aerosol composition consisting, on the one hand, of a liquid phase (or juice) containing at least one composition in accordance with any one of Claims

1 to 30 in an appropriate solvent and a propellant as well as a means of distributing the said aerosol composition.

36. Method of treating keratinous fibres, in particular hair, characterized in that the composition as defined in Claims 1 to 30 is applied to the said fibres before or after shaping the hairstyle.

37. Use of a composition according to any one of Claims 1 to 30 in or for making a cosmetic hairstyling formulation.